PATENT APPLICATION

Group Art Unit: 2851

P. KIM

108946.01

Examiner:

Docket No.:

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Kousuke SUZUKI

Application No.: 10/713,269

Filed: November 17, 2003

IMAGE FORMATION CHARACTERISTICS ADJUSTMENT METHOD FOR

PROJECTION OPTICAL SYSTEM

REQUEST FOR RECONSIDERATION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

For:

In reply to the January 27, 2005 Office Action, the shortened statutory period for reply being extended by the attached Petition for Extension of Time, Applicant requests reconsideration of this application. Claims 1-15, 18, 20-27, 29-36 and 39 are pending.

Applicant notes with appreciation the allowance of claims 1-15, 18, 20, 23-27, 29, 32, 33, 35, 36 and 39. Applicant respectfully submits that all pending claims are in condition for allowance.

Claims 21, 22, 30, 31 and 34 stand rejected under 35 U.S.C. §102(a) over U.S. Patent No. 5,838,426 to Shinonaga et al. This rejection is respectfully traversed.

Shinonaga et al. does not disclose or suggest, and thus does not anticipate, the combinations of features recited in independent claims 21 and 30. Each of these independent claims recites, *inter alia*, changing a "wavelength of the illumination light according to the change amount of the installation environment at each exposure shot or while the projection

exposure apparatus is executing a predetermined preparation operation..., wherein the predetermined preparation operation is an operation for changing the pattern of the mask or an operation for changing an aperture diaphragm which defines an illumination area of the illumination light on the mask." At col. 4, lines 37-43 and col. 9, lines 26-55, Shinonaga et al. discloses adjusting the illumination light wavelength based on a measured pressure. However, Shinonaga et al. does not disclose or suggest changing/adjusting the wavelength at the above-noted times recited in independent claims 21 and 30.

With respect to the adjustment, Shinonaga et al. discloses "[i]n order to meet daily pressure changes, every time wafers to be processed are loaded into the projection exposure apparatus, the pressure measurement is performed." Then, "[o]n the basis of the result of measurement", the wavelength is adjusted and the exposure process is performed with the adjusted wavelength. See col. 10, lines 1-8. Thus, Shinonaga et al. does not disclose or suggest changing the wavelength "at each exposure shot" or while a predetermined preparation operation "for changing the pattern of the mask" or "for changing an aperture diaphragm" is performed, as recited in claims 21 and 30. The Office Action does not even specifically address these features of claims 21 and 30.

Accordingly, independent claims 21 and 30 are patentable over Shinonaga et al.

Dependent claims 22, 31 and 34 are patentable over Shinonaga et al. for at least the same reasons as their corresponding independent claim. Withdrawal of the rejection is requested.

In view of the foregoing, Applicant respectfully submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

Respectfully submitted

Mario A. Costantino Registration No. 33,565

MAC/ccs

Attachment:

Petition for Extension of Time

Date: June 16, 2005

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